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7590 09/22/2005			EXAMINER	
Mark S. Svat		CUNNINGHAM, GREGORY F		
Fay, Sharpe, Fa	igan,			
Minnich & McKee, LLP			ART UNIT	PAPER NUMBER
1100 Superior Avenue, 7th Floor			2676	,
Cleveland OH 44114-2518				

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/056,562	SAUND ET AL.				
		Examiner	Art Unit				
		Gregory F. Cunningham	2676				
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover sheet with the	correspondence address				
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLICATION OF THE MAILING DISTRICT INTO THE MAILING DISTRICT DISTRICT INTO THE MAILING DISTRICT INTO THE MAILING DISTRICT DIS	DATE OF THIS COMMUNICATION  136(a). In no event, however, may a reply be to will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDON	N. imely filed in the mailing date of this communication. ED (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 30 c	lune 2005.					
-	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.						
3)	, <del>-</del>						
,	closed in accordance with the practice under	·	the second secon				
Disposit	ion of Claims						
4) 🖂	I)⊠ Claim(s) <u>1-23</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	Claim(s) is/are allowed.						
6)⊠	☑ Claim(s) <u>1-23</u> is/are rejected.						
7)⊠	Claim(s) <u>6,10 and 13</u> is/are objected to.						
8)[	Claim(s) are subject to restriction and/	or election requirement.					
Applicat	ion Papers						
9)[	The specification is objected to by the Examin	er.					
10)🖂	The drawing(s) filed on 25 January 2002 is/are	e: a)⊠ accepted or b)⊡ objecte	d to by the Examiner.				
	Applicant may not request that any objection to the	e drawing(s) be held in abeyance. So	ee 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the correct	ction is required if the drawing(s) is o	bjected to. See 37 CFR 1.121(d).				
11)	The oath or declaration is objected to by the E	xaminer. Note the attached Offic	e Action or form PTO-152.				
Priority	under 35 U.S.C. § 119						
•	Acknowledgment is made of a claim for foreig  ☐ All b)☐ Some * c)☐ None of:	n priority under 35 U.S.C. § 119(a	a)-(d) or (f).				
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documer		•				
	3. Copies of the certified copies of the pri	<u>-</u>	ved in this National Stage				
	application from the International Burea	, , , , , , , , , , , , , , , , , , , ,					
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	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	4) ∐ Interview Summar Paper No(s)/Mail I					
3) 🔯 Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 er No(s)/Mail Date <u>6/21/2005</u> .	_	Patent Application (PTO-152)				

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## **DETAILED ACTION**

1. This action is responsive to communications of amendment received 6/30/2005.

2. The disposition of the claims is as follows: claims 1-23 are pending in the application.

Claims 1, 3, 11 and 14 are independent claims.

## Drawings

3. In view of applicant's comments regarding intended reduced quality of certain drawings, objections are withdrawn.

# Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claims 1, 3, 11 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- Claims 1, 3, 11 and 14 are vague as to whom or what is the administrator of "automatically".

#### Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 7. Claims 1, 2, 7, 8, 11 and 12 are rejected under 35 U.S.C. 102(a) as being disclosed by Seni et al., (PGPUB-DOCUMENT-NUMBER: 20030007018), hereafter Seni.
- A. Claim 1, "An image analysis and conversion method comprising:

receiving a digital ink image having both text and line art [Often it is difficult to differentiate between these two modes of stylus operation, viz. that of a writing implement for text entry (inking mode) and its control function such as for clicking on application icons and the like (control mode). – para. 0007;

The present invention is a method of interfacing with and a handwriting user interface (HUI) for small (pocket-shirt sized) portable devices with a touch-enabled input/output (I/O) screen, such as are commonly known as personal digital assistants (PDAs). The portable devices may be capable of wireless message transmission (such as for web browsing and/or e-mail). The user interface of the present invention is typically in software and loaded into PDA storage. A state of the art handwriting recognition engine also is included in software. The handwriting user interface of the present invention enhances the usability, flexibility and power of the handheld device in which it is installed. – para. 0015;

However, small <u>digital ink</u> point at the end of a word is much easier to identify and classify as a punctuation mark, e.g. a period, comma, etc. – para. 0024;

These errors and conflicts also result from the inherent ambiguity of inputting with a single pointing device, i.e., a stylus, wherein the stylus is used both as an inking pen for writing and, as a mouse-type pointing device for function selection. For example, the device must

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distinguish between an inking stroke and scrolling the screen by dragging the stylus. By designating an input area for writing, such conflicts are resolved simply: the stylus functions as an inking pen inside the writing area and as a non-inking pointing device/mouse outside of the input area. - para. 0026, wherein 'happy' corresponds to digital ink line art in the form of text and wherein the act of using the stylus to input 'happy' constitutes "receiving"]; and

converting the digital ink image into structured object representations of the digital ink image, each of the structured object representations correlating to an automatically defined perceptually salient structured of the digital ink image," [An entire message may be quickly handwritten, converted, stored and then, transmitted, for example. - para. 0015],

"each perceptually salient structure including text and line art, wherein each of the structured object representations is editable by a structured text/graphics editor"

[FIG. 1 shows a preferred embodiment pocket sized handheld device 100 with a housing 101 graphical handwriting user interface 102 according to preferred embodiment of the present invention. – para. 0016, wherein 'happy' corresponds to digital ink line art in the form of text;

Action icons 106, 108, 110, 112, 114 are displayed to provide virtual buttons for editing any previously entered text. Preferably, the icons are displayed together at any side of the input area (e.g., left, right, top or bottom). Editing operations may include, but are not limited to: insert a space 108, backspace 112, delete 114, capitalize recognition result 110, and undo insertion of last recognition result 106. Further, as each word is entered and recognized, a stylus may be used to select one or more characters of the word in a text field of the active application. The preferred recognition engine is also capable of recognizing individual stand-alone

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characters. At any time, the user can select one (or more) character(s) from a previously entered word and write a new character(s) in the input area with the result replacing the selected text. – para. 0022;

The previously input text is displayed at the top of the screen. Each word is entered and the last recognition result remains displayed for editing in the editing area. As noted above, a single word can be selected or, individual letters within the word may be selected and corrected using the QWERTY keyboard 132. – para. 0023;

Typical recognition options may include an option to propose upper-case at the beginning of a word, an option to suggest end of word punctuation, the number of recognition results displayed in the pop-up list, the location of editing buttons (i.e., left or right hand side of the input area), and user dictionary maintenance, i.e., viewing, adding, and/or deleting entries. The option to propose upper-case may be such that, if set, the recognition engine attempts to recognize the input with and without a leading upper-case letter. – para. 0024]" is disclosed [as detailed].

(Examiner's notes:

"text" and "line art" are not distinct from each other; one can display text as line art, for example ASCII characters arranged in the form of line art, or line art as text, for example artistically arranged characters, wherein for each both line art and text are present.

"structured object representations" may be so broadly interpreted that any recognizable (perceptually salient structure) image has sufficient structure if it can be identified or recognized, i.e. line, curve, character. That which might not have "structured object representations" would be unrecognizable random patterns, but then even the Heavens have constellations.

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The act of "converting" is equivalent to 'generating' "structured object representations")

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- B. Claim 2, "The method according to claim 1 wherein the converting step includes, altering the digital ink image into multiple simultaneously existing structured alternative interpretations of the digital ink image each of the alternative interpretations being plausible intended outputs of a user" [para. 0016 at: As each word is recognized, it is shown inserted into the text at the top of the interface display 102 and, a secondary list of potential recognition candidates may be displayed in a box 120 and offered for substitution for or in lieu of the recognized word.

  Although the secondary word list box 120 is preferably displayed in the input area 104, in this example it is shown just above the handwriting input area 104; and para. 0020, 0021, and 0024], is disclosed supra for claim 1 and [as detailed]. Wherein recognition options correspond to "alternative interpretations being plausible intended outputs of a user" and 'pop-up list in box 120' corresponds to "multiple simultaneously existing structured alternative interpretations of the digital ink image".
- C. Claim 7, "The method according to claim 1 wherein the step of converting the digital ink image to the structured object representations includes generating multiple structured object representations of the digital ink image [para. 0016 at "a secondary list of potential recognition candidates may be displayed in a box 120"], the multiple structured object representations representing at least a first image representation having formal structured object representations [para. 0016 at "As each word is recognized, it is shown inserted into the text at the top of the interface display 102], and a second image representation containing informal structured object representations [para. 0016 at "A lower portion of the display is designated as a handwriting input area 104."] is disclosed supra for claim 1 and [as detailed].

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D. Claim 8, "The method according to claim 1 wherein the editing by the structured text/graphics editor permits movement of structured object representations by at least one of, individual objects, a sub-group of all the structured object representations [para. 0022 at "Editing operations may include, but are not limited to: insert a space 108, backspace 112, delete 114, capitalize recognition result 110, and undo insertion of last recognition result 106."], or as an overall group of the structured object representations" is disclosed supra for claim 1 and [as detailed]. Wherein delete corresponds to editing a sub-group of all the structured object representations. Said sub-group of all the structured object representations corresponds a letter, a character of a word, multi-digit number, group of letters, or even an entire word.

- E. Per independent claim 11, this is directed to a system for performing the method of independent claim 1, and therefore is rejected to independent claim 1.
- F. Per dependent claim 12, this is directed to a system for performing the method of claim 1 and in part of dependent claim 7, and therefore is rejected to claim 1 and dependent claim 7.

#### Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seni as applied to claim 1 above, and further in view of Microsoft Paint, hereinafter Paint.
- A. Claim 3, "An image analysis and conversion method comprising:

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receiving a digital ink image;

converting the digital ink image into structured object representations correlating to an automatically defined perceptually salient structured of the digital ink image, each perceptually salient structure including at least one of text or line art, wherein each of the structured object representations is editable by a structured text/graphics editor, and

generating multiple alternative interpretations of the digital ink image including, altering the digital ink image into informal structured object representations that are editable by the structured text/graphics editor; and

altering the digital ink image into formal structured object representations that are editable by the structured text/graphics editor", is disclosed supra by Seni in claims 1 and 2, wherein formal is depicted under 116, "happy" of Fig. 1.

Seni appears to lack disclosure of "wherein the altering of the digital ink image into multiple alternative interpretations includes, altering the digital ink image into informal structured object representations that are editable by the structured text/graphics editor"

However, Microsoft Paint employs the functionality to draw free-form lines "informal structured object representations" even in the free-form of cursive text, draw a box, circle, rectangle or square around the drawn free-form, select the area of the boxed free-form, and then flip, rotate, stretch or skew the selected area, and furthermore cut, copy, paste, move or erase a portion thereof, thus "altering of the digital ink image into multiple alternative interpretations includes, altering the digital ink image into informal structured object representations that are editable by the structured text/graphics editor".

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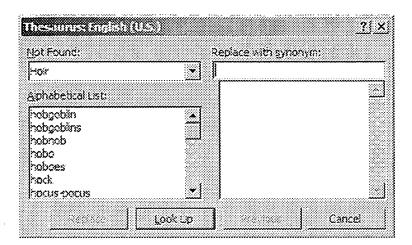
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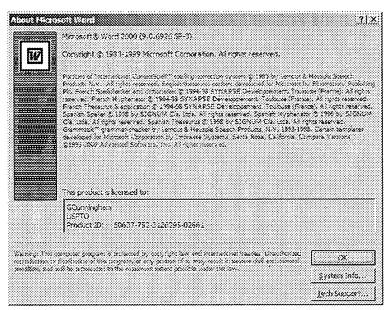
Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply digital ink recognition disclosed by Seni in combination with identifying an enclosed area and modifying said enclosed area disclosed by Microsoft Paint, and motivated to combine the teachings because it would be obvious since Microsoft Paint combines the two via freehand sketch which corresponds to the digital ink taught by Seni and Microsoft Paint's identifying an enclosed area and modifying said enclosed area corresponds to editable by the structured text/graphics editor.

(Examiner's note: Editable by the structured text/graphics editor may be as simple as deletion via backspace, delete key, or highlight and delete.)

- 10. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seni as applied to claim 1 above, and further in view of Microsoft Word.
- A. Claim 4, "The method according to claim 1 wherein the step of converting the digital ink image into structured object representations of the digital ink image includes configuring the structured object representations to represent an electronic slide of the structured text/graphics editor" is disclosed supra for claim 1. Although Seni does not appear to disclose, "includes configuring the structured object representations to represent an electronic slide", but Microsoft Word does, for example as in expressing alternative interpretations of the word 'hoir' via Microsoft Word's Thesaurus, under the Alphabetical list is shown a slider bar, see below:

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Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply digital ink recognition disclosed by Seni in combination with electronic slide presentation disclosed by Microsoft Word's Thesaurus, and motivated to combine the teachings because using Microsoft Word's Thesaurus combines both the digital ink user input and the presentation of alternatives via a slider.

B. Claim 8, "The method according to claim 1 wherein the editing by the structured text/graphics editor permits movement of structured object representations by at least one of,

individual objects, a sub-group of all the structured object representations, or as an overall group of the structured object representations" is disclosed supra for claim 1. However to solidify Seni more firmly MS Word employs highlighting (marking) any subgroup of characters, words, sentences, paragraphs or objects and editing them via deletion, movement and/or insertion, change color, grayscale, or orientation.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply digital ink recognition disclosed by Seni in combination with subgroup editing as disclosed by MS Word, and motivated to combine the teachings because highlighting (marking) Seni's digital ink of any subgroup of characters, words, sentences, paragraphs or objects and editing them via deletion, movement and/or insertion, change color, grayscale, or orientation as perform by MS Word acts to combine both of these elements.

- 11. Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seni as applied to claim 1 above, and further in view of Wilcox et al., (US-PAT-NO: 5,889,523), hereafter Wilcox.
- A. Claim 5, "The method according to claim 1, wherein the converting step includes forming of an Alternative graph, wherein the Alternative graph is configured for the generation of a plurality of simultaneously existing, structured, alternative interpretations of the digital ink image, each of the alternative interpretations being plausible intended outputs of a user" is disclosed by Seni supra for claim 1. Although Seni does not appear to disclose "wherein the converting step includes forming of an Alternative graph, wherein the Alternative graph is configured for the generation of a plurality of simultaneously existing, structured, alternative interpretations of the digital ink image, each of the alternative interpretations being plausible

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intended outputs of a user", Wilcox does in abstract and col. 2, lns. 24-46. Wherein cluster tree corresponds to alternative graph.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply digital ink recognition disclosed by Seni in combination with cluster tree (alternative graph) disclosed by Wilcox, and motivated to combine the teachings because it would it is an important interface issue in graphical editing systems as revealed by Wilcox in col. 1, lines 12-16.

- B. Claim 9, "The method according to claim 1 wherein the digital ink image is converted into the structured objects representations of the digital ink image through the use of an Alternative Graph" is disclosed by Seni supra for claim 1 and Wilcox for claim 5.
- 12. Claims 14, 15, 17-20, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seni as applied to claim 1 above, and further in view of Golovchinsky et al., (US-PAT-NO: 6,389,435), hereafter Golovchinsky.
- A. Claim 14, "On a screen display of an electronic device operating a structured text/graphics editor, an image representation comprising: structured object representations of a digital ink image, each structured object representations correlating to an automatically defined perceptually salient areas of the digital ink image, wherein each of the structured object representations is editable by the structured text/graphics editor to allow a user to generate alternative interpretations of the digital ink image, the alternative interpretations simultaneously presented and are each plausible intended outputs of a user" is disclosed by Seni supra for claims 1 and 11. While Seni does disclose "representations correlating to perceptually salient areas of the digital ink image, the alternative interpretations simultaneously presented and are each

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plausible intended outputs of a user" as acknowledged by the applicant for independent claim 1, Golovchinsky further solidifies this at [An embodiment of the system and method of the invention provides a perceptually-motivated model of <u>freeform digital ink marks</u> that applies higher weight to <u>more saliently</u> marked terms. For example, a user may choose to use <u>digital ink</u> that has a <u>high salience such as a bright color</u> and the system may apply a higher weight to the terms that are marked with this bright color <u>digital ink</u> than those terms that are marked with a <u>less salient digital ink</u> for the query. The search results will reflect the greater weight given to the terms marked with the <u>high salience freeform digital ink</u>. - col. 4, lns. 58-67].

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply digital ink recognition disclosed by Seni in combination with salient digital ink disclosed by Golovchinsky, and motivated to combine the teachings because combinations of shapes and colors can be used for the freeform digital ink marks to create a large number of identifiable terms as revealed by Golovchinsky in col. 2, lines 23-25.

B. Claim 15, "The image representation according to claim 14 wherein the structured object representations are informal structured object representations, and formal structured object representations" is disclosed supra for claims 3 and 14 and furthermore by Seni in [para. 0022], particularly at "At any time, the user can select one (or more) character(s) from a previously entered word and write a new character(s) in the input area with the result replacing the selected text".

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply digital ink recognition disclosed by Seni in combination with salient digital ink disclosed by Golovchinsky, and motivated to combine the teachings because

combinations of shapes and colors can be used for the freeform digital ink marks to create a large number of identifiable terms as revealed by Golovchinsky in col. 2, lines 23-25.

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- C. Claim 17, "The image representation according to claim 14 wherein a first structured object representation is spatially contained within a second structured object representation" is disclosed by Seni and Golovchinsky supra for claim 14. Wherein a letter corresponds to a first structured object and a word corresponds to a second structured object wherein the two are spatially connected.
- D. Claim 18, "The image representation according to claim 14 wherein a new structured object representation is added to existing structured object representations" is disclosed by Seni and Golovchinsky supra for claim 14. See Seni, Fig. 1, wherein each new word is added to existing structured text at top of area 102.
- E. Claim 19, "The image representation according to claim 14 wherein the structured object representations define a text block structure" is disclosed by Seni and Golovchinsky supra for claim 14. See Seni, Fig. 1.
- F. Claim 20, "The image representation according to claim 19 wherein the text block structure includes a display of text parameters including at least one of text layout, text font, bullets, underlines and dummy characters" is disclosed by Seni and Golovchinsky supra for claim 18. See Seni, Fig. 1, depicted text layout.
- G. Claim 22, "The image representation according to claim 14 wherein distinct alternative interpretations may be displayed at the same time" is disclosed by Seni and Golovchinsky supra for claim 14. See Seni, Fig. 1, pop-up window list 120.

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- H. Claim 23, "The image representation according to claim 22 wherein display of the alternative interpretations is accomplished by the use of at least one of underlays, bubble or balloon images, coloring, shading transparency/translucency, defocusing, and pop-up windows" is disclosed by Seni and Golovchinsky supra for claim 14. See Seni, Fig. 1, pop-up window list 120.
- 13. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seni as applied to claim 1 above, further in view of Golovchinsky et al., (US-PAT-NO: 6,389,435), hereafter Golovchinsky, and further in view of Official Notice.
- A. Claim 21, "The image representation according to claim 20 wherein the dummy characters are replaceable with target characters" is disclosed by Seni and Golovchinsky supra for claim 20. However they do not appear to disclose, "wherein the dummy characters are replaceable with target characters", but Official notice is taken that the art is replete wherein the dummy characters are replaceable with target characters in the form of temporary characters, templates, boiler plate documents and slides, and place holders.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply digital ink recognition disclosed by Seni in combination with salient digital ink disclosed by Golovchinsky coupled with dummy characters disclosed by Official Notice (target characters in the form of temporary characters, templates, boiler plate documents and slides, and place holders), and motivated to combine the teachings because combinations of shapes and colors can be used for the freeform digital ink marks to create a large number of identifiable terms as revealed by Golovchinsky in col. 2, lines 23-25.

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14. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seni as applied to claim 1 above, further in view of Golovchinsky et al., (US-PAT-NO: 6,389,435), hereafter Golovchinsky and further in view of Mahoney et al., (US-PAT-NO: 6,470,095), hereafter Mahoney.

A. Claim 16, "The image representation according to claim 15 wherein the alternative interpretations permit a mixing of the formal structured object representations and the informal structured object representations in a single image representation" is disclosed by Seni and Golovchinsky supra for claim 15. Although Seni and Golovchinsky do not appear to disclose, "wherein the alternative interpretations permit a mixing of formal structured object representations and informal structured object representations in a single image representation", Mahoney does in Fig. 3 at col. 2, lns. 45-49.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply digital ink recognition disclosed by Seni in combination with salient digital ink disclosed by Golovchinsky coupled with handwritten and typeset text displayed in a single image disclosed by Mahoney, and motivated to combine the teachings because combinations of shapes and colors can be used for the freeform digital ink marks to create a large number of identifiable terms as revealed by Golovchinsky in col. 2, lines 23-25 and because the amount of a human user's time required to enter and edit such user-created borders is significant as revealed by Mahoney in col. 1, lns. 22-23.

# Allowable Subject Matter

15. Claims 6, 10 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

# Response to Arguments

16. Although applicants have amended claims in light of telephone interview conducted on June 21, 2005 and made of record, the claims remain sufficiently broad to still be read on by Seni et al. as reflected supra for rejected claims.

Substance of the prior Office Action response to arguments, mail date 2/22/2005, used in the rejection is incorporated herein by reference.

See Examiner's notes, supra for claim 1 and equally applied to claims 3, 11 and 14. (Examiner's notes:

"text" and "line art" are not distinct from each other; one can display text as line art, for example ASCII characters arranged in the form of line art, or line art as text, for example artistically arranged characters, wherein for each both line art and text are present.

"structured object representations" may be so broadly interpreted that any recognizable (perceptually salient structure) image has sufficient structure if it can be identified or recognized, i.e. line, curve, character. That which might not have "structured object representations" would be unrecognizable random patterns, but then even the Heavens have constellations.

The act of "converting" is equivalent to 'generating' "structured object representations")

With regard to "presented simultaneously" and "existing", both these ideas are present with Seni et al. item 120 in Fig. 1.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### Responses

18. Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231.

## Inquiries

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory F. Cunningham whose telephone number is (571) 272-7784.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

On July 15, 2005, the Central FAX Number was change to 571-273-8300. This new Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus.

Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number. To give customers time to adjust to the new Central FAX Number, faxes sent to the old number (703-872-9306) will be routed to the new number until September 15, 2005. After September 15, 2005, the old number will no longer be in service and 571-273-8300 will be the only facsimile number recognized for "centralized delivery".

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory F. Cunningham Examiner Art Unit 2676

gfc

09/15/2005

MATTHEW C. BELLA SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600

Marker ( Bella